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| 10/663,138 | 09/16/2003 | Kenichi Kitayama | HONZ 2 00012 | 3991 |
| 27885 | 7590 | 07/20/2005 | EXAMINER | |
| FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114 | | | ENGLE, PATRICIA LYNN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3612 | |

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,138

Applicant(s)

KITAYAMA ET AL.

Examiner

Patricia L. Engle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-12 and 20-22 are objected to because of the following informalities: the term “windowless” is inappropriate in claim 1. The Examiner understands that the Applicant is trying to eliminate references which include a tailgate with a portion that includes a glass pane, however the term window could also be used to refer to an opening. Therefor the Applicants do not even disclose a windowless skin because of the opening 112. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13, 14, 17, 20 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Komatsu et al. (US Patent 6,776,449, which was published as WO02/072373 on September 19, 2002).

Regarding claim 13, Komatsu et al. discloses a vehicle closure structure comprising: a frame having a double-hat shape (3) including a raised section (10) and an inner flange and an outer flange (Fig. 4) flanking the raised section; a sheet molding compound structural cladding (4) adjacent and connected to the raised section (Fig. 3) of the frame (3); and a skin (2) adjacent and connected to the outer flange of the frame (3- Fig. 4).

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Regarding claim 14, Komatsu et al. disclose the vehicle closure of claim 13, further including: a control mechanism (5) connected to the inner flange of the frame for operating and disabling associated locks and hinges of the tailgate.

Regarding claim 17, Komatsu et al. disclose the vehicle closure structure of claim 13 further including: at least one stiffener (12) connected to the frame reinforcing for the frame.

Regarding claim 20, Komatsu et al. disclose the tailgate assembly of claim 1, wherein the stamped sheet metal frame (3) is an integral structured formed from a single sheet.

Regarding claim 21, Komatsu et al. disclose the tailgate assembly of claim 1, wherein the stamped sheet metal frame (3) substantially forms a tailgate structure and defines a size of the tailgate structure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 1-12, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seksaria et al. (US Patent 6,672,642 filed on June 11, 2002) in view of Mark's Handbook, Section 6 (Materials of Engineering, Aluminum and Its Alloys, pp. 6-53 to 6-56).

Regarding claim 1, Seksaria et al. disclose a tailgate assembly comprising a frame (35) having a reinforced cross-sectional shape (Fig. 4) with an inner side (downwardly facing side in Fig. 4) facing an associated vehicle's load-carrying bed and an outer side (upwardly facing side in Fig. 4) opposite the inner side, said frame (35) pivotally connected to a wall forming the vehicle's open load-carrying bed (Fig. 7 and Fig. 1); and a skin (39) attached to the outer side of the frame. Regarding claim 2, Seksaria et al. disclose a structural cladding (38) attached to the inner side of the frame (35) and substantially covering said inner side (Fig. 2). Regarding claim 3, Seksaria et al. disclose that the structural cladding (38) includes a corrugated section (45) to provide torsional and bending resistance. Regarding claim 4, Seksaria et al. disclose that the structural cladding (38) is formed of a sheet molding compound which enables the cladding to be relatively lightweight. Regarding claim 5, Seksaria et al. disclose that the frame includes a raised section (67,64,65) longitudinally along each of a top edge and a bottom edge of the tailgate assembly for increasing the stiffness of the frame and resistance bending of the frame when a load is applied thereto. Regarding claim 9, Seksaria et al. disclose a cap (40) connected to the cladding (38) and the skin (39) over a top of the frame (35). Regarding claims 10 and 11, Seksaria et al. disclose that the frame includes a reinforcing rib (see Fig. 4) along each perimeter edge of the frame. Regarding claim 12, Seksaria et al. discloses an embossed area (above to 62

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in Fig. 4) adjacent a perimeter of the frame. Regarding claim 21, Seskaria et al. disclose that the frame substantially forms a tailgate structure and defines a size of the tailgate structure (Fig. 2). Regarding claim 22, Seskaria et al. disclose that the structural cladding (38) includes a corrugated section (45) and one side of the cladding (38) defines an outer surface of the tailgate assembly facing the open load-carrying bed.

Seskaria et al. do not disclose that the frame is metal. However Seskaria et al. do disclose that the skin and the cladding are aluminum and the invention is aimed at making the tailgate light weight. And that metal tailgates are well known in the art (column 1, lines 8-12).

Mark's Handbook, Section 6.4, pp. 6-53 to 6-56, disclose the advantages of using aluminum are its low density, relatively high strength, good corrosion resistance and good working properties (6-53, column 1). Also on p. 6-55 Mark's Handbook discloses that the 2xxx series of aluminum alloys attain strengths comparable to steel alloys.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to make the frame of Seskaria of a lightweight metal, such as aluminum.

The motivation would have been to have a light weight tailgate with relatively high strength and good corrosion properties. Another motivation would have been to make the entire tailgate of the same material so that the frame and the skin and cladding all had the same thermal expansion and contraction rates, to prevent rattling of the frame inside the shell of the tailgate and to allow the hinge members to be easily attached to the frame member.

Regarding the limitation that the frame is a stamped sheet metal frame, MPEP 2113 Product-by-Process Claims states that "If the product in the product-by-process claim is that same as or obvious from a product of the prior art, the claim is unpatentable even though the

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prior art product was made by a different process.” The tailgate assembly is anticipated by Seskaria et al. The process by which the frame of the tailgate assembly is made is not a patentable distinction.

Therefore, it would have been obvious to combine Mark’s Handbook with Seskaria et al. to obtain the invention as specified in claims 1-5, 9-12, 21 and 22.

Regarding claims 6 and 8, Seskaria et al. as modified disclose a flange along element 61 which attaches to the tailgate skin. Seskaria et al. as modified do not specifically disclose a flange along the entire perimeter of the frame to attach to the skin. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a flange along the entire perimeter of the flange. The motivation would have been to provide easy attachment locations for mounting the frame to the skin and to ensure that the frame is properly located in comparison with the skin.

Regarding claim 7, Seskaria et al. as modified do not disclose that the frame is connected to the via welding. However, welding is a well known technique for joining two aluminum pieces.

7. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu et al.

Regarding claims 15 and 16, Komatsu et al. disclose the tailgate assembly of claim 2. Komatsu et al. do not disclose that the structural cladding includes a corrugated section to provide torsional and bending resistance. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a corrugated section on the cladding (4). The motivation would have been to increase the rigidity of the cladding.

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8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu et al. in view of Smith (US Patent 2,806,735).

Komatsu et al. disclose the tailgate of claims 1-13 and 15-17.

Komatsu et al. do not disclose that the tailgate pivots about a horizontal and vertical axis.

Smith discloses a tailgate which pivots about a horizontal axis and a vertical axis.

Komatsu et al. and Smith are analogous art because they are from the same field of endeavor, i.e., tailgates.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to allow the tailgate to pivot about a horizontal axis or a vertical axis.

The motivation would have been to give the truck operator greater versatility in loading and unloading the truck bed.

Therefore, it would have been obvious to combine Smith with Komatsu et al. to obtain the invention as specified in claim 19.

Response to Arguments

9. Applicant's arguments with respect to claims 1-12 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed May 23, 2005 have been fully considered but they are not persuasive. Regarding claims 13-19 the applicant argues that Komatsu et al. does not disclose that the cladding 4 is a sheet molding compound. Yet at the same time the applicant states that they do not want the definition provided read into the claim. Therefore, the Examiner's stance is that a sheet of material which can be molded meets the limitations of a sheet molding compound.

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If the Applicant were to insist that the cladding (4) must be made of a sheet molding compound, the Examiner would point to Seskaria et al. Seskaria et al. disclose that plastic material can be exchanged for metal material while providing rigidity to the tailgate. Regarding claim 15, the Applicant argues that Komatsu et al. do not disclose that the cladding 4 could include corrugations. The Examiner takes Official Notice that providing corrugation increases rigidity. Seskaria et al. disclose corrugation to increase rigidity, tractor-trailer trailers include corrugation for increased rigidity, vehicle side doors include inner corrugated panels to increase rigidity, and cardboard includes corrugation to increase rigidity. Therefor including corrugation for increased rigidity is not a novel feature. The applicant also states that no one would be motivated to include a corrugated section because no load would ever be applied to the cladding member 4. The Examiner points out that a load would be applied to the cladding 4 when the vehicle is involved in an accident or when a load inside the vehicle slams against the tailgate due to sudden acceleration or sudden deceleration.

The Applicant stated that they were unclear of the rejection of claim 19. The Examiner has clarified the rejection of claim 19. Due to the unclear rejection of claim 19 and the Applicant's lack of ability to contest the rejection, this rejection is being made non-final.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Engle whose telephone number is (571) 272-6660. The examiner can normally be reached on Monday - Friday from 8:00 to 4:30. After April 5, 2005, the Examiner can be reached at (571) 272-6660.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-873-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patricia L Engle
Primary Examiner
Art Unit 3612

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July 15, 2005